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Michael Xie

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EXAMINER

SAN JUAN, MARTINJERIKO P

ART UNIT

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2132

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/624,941	Applicant(s) XIE, MICHAEL	
	Examiner MARTIN JERIKO P. SAN JUAN	Art Unit 2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 13, 14, 17-22 and 27-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 13, 14, 17-22 and 27-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is a response to Applicant's Amendments filed on December 14, 2007.

Claims 1-10, 13-14, 17-22, and 27-42 were originally requested for continued examination.

Claims 1-10, 13-14, 17-22, and 27-42 were rejected on October 3, 2007.

Claims 1, 19, 27, 30, and 32 were amended.

Claims 1-10, 13-14, 17-22, and 27-42 are currently pending.

Interview

1. The indicated allowability of claims 1-10, 13-14, 17-22, and 32 in a telephone interview with Gerald Chan on February 27, 2008 for a proposed Examiner's Amendments are withdrawn in view of a previously cited prior art reference(s) to Canion et al. [US 2002/0108059 A1], hereinafter Canion.

The subject matter initially thought allowable by the Examiner as discussed in the interview, regarding the first processor configured to perform filtering of the network traffic if the type of the network traffic content does not match the prescribed type, is actually taught by Canion.

The premature indication of allowability is regretted.

Response to Arguments

1. Applicant's arguments, see Remarks, filed December 14, 2007, with respect to the rejection(s) of claim(s) 1, and 19 under 35 USC 103(a) have been fully considered and are persuasive. The rejections of 1-10, 13-14, 17-22, and 32 under 35 USC 103(a) have been withdrawn.

However, upon further consideration, a new ground(s) of rejection is made in view of previously cited art by Canion et al. [US 2002/01089059 A1].

2. Applicant's arguments with respect to claims 27-31, and 33-42 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

1. Claim 1-10, 13-14, 17-22, and 27-42 are rejected under 35 U.S.C. 102(a) as being anticipated by Canion et al. [US 2002/0108059 A1] hereinafter Canion.

Regarding claim 1, Canion teaches a device for managing network traffic flow, the device comprising: a first processor [US 2002/0108059 A1, Pg 5, Par 0051 –“Network Interface Processing Engine”], the first processor configured to receive network traffic content [US 2002/0108059 A1, Pg 5, Par 0052], determine whether a protocol of the network traffic content matches a prescribed protocol of network traffic content that could contain content desired to be detected by comparing a type of the network traffic content with a prescribed type [US 2002/0108059 A1, Pg 5, Par 0055 –“In conventional operation, a network process receives a packet from a port, verifies fields in the packet header, and decides on an outgoing port to which it forwards the packet.” An “outgoing port” teaches a prescribed type. Network traffic content of the various prescribed types are received by their corresponding Transport/Protocol Processing Engine (Par 0060), and Application Processing Engine (Par 0074).], store the network traffic content in a stack when the protocol of the network traffic content matches the prescribed protocol [US 2002/0108059 A1, Par 0077 –“Storage management engine may be any hardware or hardware/software subsystem suitable for effecting delivery of requested content from content sources in response to processed requests received from application processing engine.” Par 0079, “Direct communication between storage processing engine and transport processing engine enables application processing engine to be bypassed with the requested content.” Examiner notes that all secondary processors are associated with a stack.] [US 2002/0108059 A1, Pg 8, Par 0080 –“Storage management engine may employ any suitable method for caching data, including ... FIFO.” Examiner notes “caching” teaches storing of network traffic content in a stack for

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the secondary processing engines. Secondary processing engines are associated with processing network traffic content when the protocol of the network traffic content matches the prescribed protocol.], and perform filtering of the network traffic if the type of the network traffic content does not match the prescribed type [US 2002/0108059 A1, Pg 10, Par 0092 –“For example, if a content delivery system is configured only to accept HTTP requests, then other requests such as FTP, telnet, etc. may be rejected or filtered.” “This filtering may be applied directly at the Network Interface Engine.”]; and a second processor associated with a stack [US 2002/0108059 A1, Pg 6, Par 0060 -- “Transport/Protocol Processing Engine” reads on a secondary processor] [US 2002/0108059 A1, Pg 7, Par 0074 –“Application Processing Engine” also reads on a secondary processor.] [US 2002/0108059 A1, Pg 8, Par 0076 --All the processing engines are associated with the Storage Management Engine which contains the stack (Par 0081).], wherein the second processor is configured to determine whether the network traffic content contains the content desired to be detected if the type of the network traffic content matches the prescribed type [US 2002/0108059 A1, Pg 19, Par 0174 --“A security accelerator is programmed to receive packets from the network and to examine each packet to determine whether data in the packet represents a potential security violation.” Examiner notes that data in the packet representing a potential security violation reads on content desired to be detected. Also based from the disclosed architecture, it is implied that the secondary processing engines (not the Network Interface Engine) perform the examination of the packets.]

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Regarding claim 2, Canion teaches the device of claim 1, wherein the first processor comprises a general purpose processor [US 2002/0108059 A1, Par 0097 – “Pentium”].

Regarding claim 3, Canion teaches the device of claim 1, wherein the first processor comprises an ASIC processor [US 2002/0108059 A1, Par 0119 – “ASIC”].

Regarding claim 4, Canion teaches the device of claim 3, wherein the ASIC processor is a semi-custom ASIC processor. It is official notice that semi-custom ASIC processors are well known in the art of utilizing ASIC processors.

Regarding claim 5, Canion teaches the device of claim 3, wherein the ASIC processor is a programmable ASIC processor [The examiner notes that ASIC processors are programmable.]

Regarding claim 6, Canion teaches the device of claim 1, wherein the first processor is further configured to send the network traffic content to a user when the protocol of the network traffic content does not match the prescribed protocol [US 2002/0108059 A1, Pg 5, Par 0052].

Regarding claim 7, Canion teaches the device of claim 1, further comprising the stack [US 2002/0108059 A1, Pg 8, Par 0081] [US 2002/0108059 A1, Pg 14, Par 0138].

Regarding claim 8, Canion teaches the device of claim 7, wherein the stack is implemented in the first processor or in the second processor [US 2002/0108059 A1, Pg 8, Par 0081] [US 2002/0108059 A1, Pg 14, Par 0138].

Regarding claim 9, Canion teaches the device of claim 8, wherein the stack is configured to store the network traffic content in accordance with the protocol of the network traffic content [US 2002/0108059 A1, Pg 8, Par 0077-0078].

Regarding claim 10, Canion teaches the device of claim 1, wherein the first or the second processor is further configured to assemble the at least a portion of the network traffic content with the rest of the network traffic content, and transmit the network traffic content to a user when it is determined that the network traffic content does not contain the content desired to be detected [US 2002/0108059 A1, Pg 19, Par 0174-0175 -- Examiner notes that it is inherent to re-assemble the network traffic content after it has been examined by the security accelerator for delivery of network traffic content to the end user.].

Regarding claim 13, Canion teaches the device of claim 1, wherein the second processor comprises an ASIC processor [US 2002/0108059 A1, Par 0119 – “ASIC”].

Regarding claim 14, Canion teaches the device of claim 1, wherein the first or the second processor is further configured to flag the network traffic content when the

protocol of the network traffic content matches the prescribed protocol, and send the flagged network traffic content to the memory [US 2002/0108059 A1, Pg 7, Par 0068].

Regarding claim 17, Canion teaches the device of claim 14, wherein the second processor comprises an ASIC processor [US Pub No. 2002/0108059 A1, Par 0119 – “ASIC”].

Regarding claim 18, Canion teaches the device of claim 1, wherein the content desired to be detected is selected from the group consisting of a virus, a worm, a web content, a Trojan agent, an email spam, and a packet transmitted by a hacker [US 2002/0108059 A1, Pg 19, Par 0174 --Examiner notes that data in the packet representing a potential security violation reads on group consisting of a virus, a worm, a web content, a Trojan agent, an email spam, and a packet transmitted by a hacker.].

Regarding claim 32, Canion teaches the device of claim 1, further comprising the memory [US 2002/0108059 A1, Fig 1C, 1D, 1E, 1F].

Claim 19-22 are rejected because it contains similar subject matter as claims 1, 9, 10, and 14.

Regarding claim 27, Canion teaches a device for managing network traffic flow, the device comprising: a first processor, the first processor configured to receive network

traffic content [US 2002/0108059 A1, Pg 5, Par 0052], flag the network traffic content by inserting data or modifying a portion of the network traffic content [US 2002/0108059 A1, Pg 7, Par 0071], send the flagged network traffic content to a module [US 2002/0108059, Pg 7, Par 0071], the module configured to pass unflagged data to a user [US 2002/0108059 A1, Pg 10, Par 0092 –Examiner notes that data pertaining to requests not supported/prescribed by the content delivery system's processing modules would have been unflagged. Such data are (filtered/screened or discarded at the Network Interface depending on built in firewall feature of Canion) passed to the user directly from the network interface engine.] and prevent flagged data from being sent to the user [US 2002/0108059 A1, Pg 10, Par 0092 –Examiner notes that data pertaining to requests supported/prescribed by the content delivery system's processing modules are passed to the corresponding processing module, hence reading on “preventing data from being sent to the user.”], and send a copy of the network traffic content to a second processor [Sending flagged data to a corresponding secondary processing module reads on “sending a copy of the network traffic content to a second processor.”], the second processor configured to determine whether the network traffic content contains content desired to be detected [US 2002/0108059 A1, Pg 19, Par 0174 --"A security accelerator is programmed to receive packets from the network and to examine each packet to determine whether data in the packet represents a potential security violation." Examiner notes that data in the packet representing a potential security violation reads on content desired to be detected. Also based from the disclosed architecture, it is

implied that the secondary processing engines (not the Network Interface Engine) perform the examination of the packets.]; and the second processor.

Regarding claim 28, Canon teach the device of claim 27, wherein the first processor is further configured to transmit the network traffic content to a user when it is determined that the network traffic content does not contain the content desired to be detected [US 2002/0108059 A1, Pg 11, Par 0106 –Examiner notes Network Interface Engine is always responsible for delivering/fetching content to/from network/user.] [US 2002/0108059 A1, Pg 19, Par 0177].

Regarding claim 29, Canon teaches the device of claim 27, wherein the module comprises a memory, a buffer, or at least a portion of a processor [US 2002/0108059 A1, Fig 1C, 1D, 1E, 1F].

Claim 30, 31 is rejected because it contains similar subject matter as claim 27, 28.

Regarding claim 33, Canon teaches the device of claim 27, wherein the first processor is configured to pass a portion of the network traffic content downstream before the second processor finishes processing the network traffic content [This claim is inherent since the unflagged portion of the network traffic content is passed downstream, while the flagged portion of the network traffic content is being analyzed/examined for “undesirable/malicious” content.].

Regarding claim 36, Canon teaches the device of claim 27, wherein the first processor is configured to flag the network traffic content by modifying data associated with the network traffic content or by inserting data to the network traffic content [US 2002/0108059 A1, Pg 7, Par 0071].

Claim 37, 39 is rejected because it contains similar subject matter as claim 33, 36.

Regarding claim 40, Canon teaches a device for managing network traffic flow, the device comprising: a first processor, the first processor configured to receive network traffic content [US 2002/0108059 A1, Pg 5, Par 0052], pass a first portion of the network traffic content downstream [US 2002/0108059 A1, Pg 10, Par 0092 –Examiner notes that data pertaining to requests not supported/prescribed by the content delivery system's processing modules are (filtered/screened or discarded at the Network Interface depending on built in firewall feature of Canon) passed to the user directly from the network interface engine.], and pass a second portion of the network traffic content to a stack [US 2002/0108059 A1, Par 0077 –“Storage management engine may be any hardware or hardware/software subsystem suitable for effecting delivery of requested content from content sources in response to processed requests received from application processing engine.” Par 0079, "Direct communication between storage processing engine and transport processing engine enables application processing engine to be bypassed with the requested content.” Examiner notes that all secondary

processors are associated with a stack.] [US 2002/0108059 A1, Pg 8, Par 0080 – “Storage management engine may employ any suitable method for caching data, including ... FIFO.” Examiner notes “caching” teaches storing of network traffic content in a stack for the secondary processing engines. Secondary processing engines are associated with processing network traffic content when the protocol of the network traffic content matches the prescribed protocol.] for allowing the second portion to be scanned for content that is desired to be detected [US 2002/0108059, Pg 7, Par 0071]; and a second processor that is configured to scan the second portion for the content desired to be detected [US 2002/0108059 A1, Pg 19, Par 0174 --“A security accelerator is programmed to receive packets from the network and to examine each packet to determine whether data in the packet represents a potential security violation.” Examiner notes that data in the packet representing a potential security violation reads on content desired to be detected. Also based from the disclosed architecture, it is implied that the secondary processing engines (not the Network Interface Engine) perform the examination of the packets.].

Claim 41 is rejected because it contains similar subject matter as claim 28.

Regarding claim 42, Canon teaches the device of claim 40, wherein the first portion of the network traffic content is not scanned for the content that is desired to be detected [US 2002/0108059 A1, Pg 10, Par 0092 –Examiner notes that data pertaining to requests not supported/prescribed by the content delivery system's processing modules

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would have been unflagged. Unflagged data reads on first portion of network traffic content. The unflagged data are not sent to the secondary processing modules to be scanned for the content that is desired to be detected.].

Regarding claim 34, Canion teaches the device of claim 27, wherein the first processor and the second processor are parts of a processor [US 2002/0108059 A1, Par 0097 – Examiner notes employing processing modules capable of performing the function of more than one engine in a content delivery system.].

Regarding claim 35, Canion teaches the device of claim 34, wherein the processor comprises an ASIC processor [US Pub No. 2002/0108059 A1, Par 0119 – “ASIC”].

Regarding claim 38, Canion teaches the method of claim 30, wherein the second processor comprises an ASIC processor [US Pub No. 2002/0108059 A1, Par 0119 – “ASIC”].

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARTIN JERIKO P. SAN JUAN whose telephone number is (571)272-7875. The examiner can normally be reached on M-F 8:30a - 6:00p EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MJSJ/

Martin Jeriko San Juan
Examiner. Art Unit 2132

/Gilberto Barron Jr/

Supervisory Patent Examiner, Art Unit 2132